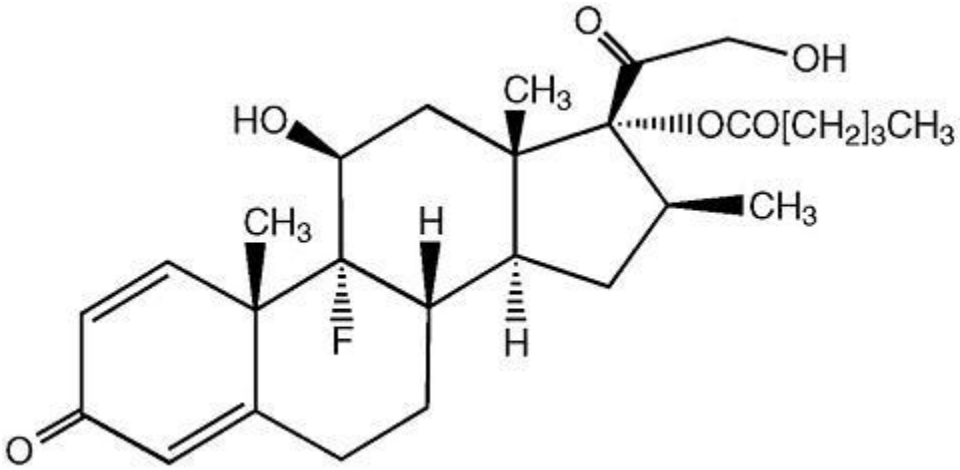
BETAMETHASONE VALERATE - betamethasone valerate cream
BETAMETHASONE VALERATE - betamethasone valerate lotion
TEVA PHARMACEUTICALS USA

DESCRIPTION

Betamethasone Valerate Cream and Lotion contain betamethasone valerate, a topical corticosteroid. Each gram of the cream or lotion contains 1.2 mg Betamethasone Valerate equivalent to 1.0 mg Betamethasone. The topical corticosteroids constitute a class of primarily synthetic steroids used as anti-inflammatory and antipruritic agents.

Betamethasone Valerate is chemically designated as 9-Fluoro-11β, 17, 21-trihydroxy-16β-methylpregna-1,4-diene-3,20-dione 17-valerate.

It can be structurally represented as follows:



$C_{27}H_{37}FO_6$ M.W. 476.58

Betamethasone Valerate is a white to practically white, odorless powder. It melts at 190^{o} with decomposition. It is practically insoluble in water, freely soluble in acetone and in chloroform, soluble in alcohol, and slightly soluble in benzene and in ether.

Betamethasone Valerate Cream 0.1% is Betamethasone Valerate in an aqueous vanishing cream base of mineral oil, white petrolatum, polyethylene glycol 1000, ceteareth-15, cetyl alcohol, stearyl alcohol, propylene glycol, purified water, and 4-chloro-m-cresol as a preservative.

Betamethasone Valerate Lotion 0.1% is Betamethasone Valerate in a vehicle consisting of isopropyl alcohol 47.5%, carbomer 934P, and purified water. ph adjusted with sodium hydroxide.

CLINICAL PHARMACOLOGY

Betamethasone Valerate as a topical corticosteroid, has anti-inflammatory, antipruritic and vasoconstrictive actions.

The mechanisms of anti-inflammatory activity of the topical corticosteroids are unclear. Various laboratory methods, including vasoconstrictor assay, are used to compare and predict potencies and/or clinical efficacies of the topical corticosteroids. There is some evidence to suggest that a recognizable correlation exists between vasoconstrictor potency and therapeutic efficacy in man.

Pharmacokinetics

The extent of percutaneous absorption of topical corticosteroids is determined by many factors including the vehicle, the integrity of the epidermal barrier, and the use of occlusive dressings.

Betamethasone Valerate can be absorbed from normal intact skin. Inflammation and/or other disease processes in the skin increase percutaneous absorption. Occlusive dressings substantially increase the percutaneous absorption of topical corticosteroids.

Thus, occlusive dressings may be a valuable therapeutic adjunct for treatment of resistant dermatoses. (See DOSAGE AND ADMINISTRATION).

Once absorbed through the skin, Betamethasone Valerate is handled through pharmacokinetic pathways similar to systemically administered corticosteroids. Corticosteroids are bound to plasma proteins in varying degrees. They are metabolized primarily in the liver and are then excreted by the kidneys. Some of the topical corticosteroids and their metabolites are also excreted into the bile.

INDICATIONS AND USAGE

Betamethasone Valerate Cream and Lotion are indicated for the relief of the inflammatory and pruritic manifestations of corticosteroid-responsive dermatoses.

CONTRAINDICATIONS
Betamethasone Valerate Cream and Lotion are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparations.

PRECAUTIONS

General
Systemic absorption of topical corticosteroids has produced reversible hypothalamic-pituitary-adrenal (HPA) axis suppression, manifestations of Cushing's syndrome, hyperglycemia, and glucosuria in some patients.
Conditions which augment systemic absorption include the application of the more potent steroids, use over large surface area, prolonged use, and the addition of occlusive dressings.
Therefore, patients receiving a large dose of a potent topical steroid applied to a large surface area or under an occlusive dressing should be evaluated periodically for evidence of HPA axis suppression by using the urinary free cortisol and ACTH stimulation tests. If HPA axis suppression is noted, an attempt should be made to withdraw the drug, to reduce the frequency of application, or to substitute a less potent steroid.
Recovery of HPA axis function is generally prompt and complete upon discontinuation of the drug. Infrequently, signs and symptoms of steroid withdrawal may occur, requiring supplemental systemic corticosteroids.
Children may absorb proportionally larger amounts of topical corticosteroids and thus be more susceptible to systemic toxicity. (See PRECAUTIONS—Pediatric Use). If irritation develops, use of topical corticosteroids should be discontinued and appropriate therapy instituted.
In the presence of dermatological infections, the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, use of topical corticosteroids should be discontinued until the infection has been adequately controlled.

Information for Patient
Patients using topical corticosteroids should receive the following information and instructions:
1. This medication is to be used as directed by the physician. It is for external use only. Avoid contact with the eyes.

2. Patients should be advised not to use this medication for any disorder other than for which it was prescribed.

3. The treated skin area should not be bandaged or otherwise covered or wrapped as to be occlusive unless directed by the physician.

4. Patients should report any signs of local adverse reactions especially under occlusive dressing.

5. Parents of pediatric patients should be advised not to use tight-fitting diapers or plastic pants on a child being treated in the diaper area, as these garments may constitute occlusive dressings.

Laboratory Tests
The following tests may be helpful in evaluating the HPA axis suppression: Urinary free cortisol test - ACTH stimulation test.

Carcinogenesis and Mutagenesis and Impairment of Fertility
Long-term animal studies have not been performed to evaluate the carcinogenic potential or the effect on fertility of topical corticosteroids.
Studies to determine mutagenicity with prednisolone and hydrocortisone have revealed negative results.

Pregnancy Category C
Corticosteroids are generally teratogenic in laboratory animals when administered systemically at relatively low dosage levels. The more potent corticosteroids have been shown to be teratogenic after dermal application in laboratory animals. There are no adequate and well-controlled studies in pregnant women on teratogenic effects from topically applied corticosteroids. Therefore, topical corticosteroids should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Drugs of this class should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time.

Nursing Mothers
It is not known whether topical administration of corticosteroids could result in sufficient systemic absorption to produce detectable quantities in breast milk. Systemically administered corticosteroids are secreted into breast milk in quantities not likely to have a deleterious effect on the infant. Nevertheless, caution should be exercised when topical corticosteroids are administered to a nursing woman.

Pediatric Use
Pediatric patients may demonstrate greater susceptibility to topical corticosteroid-induced HPA axis suppression and Cushing's syndrome than mature patients because of a larger skin surface area to body weight ratio.

Hypothalamic-pituitary-adrenal (HPA) axis suppression, Cushing's syndrome, and intracranial hypertension have been reported in pediatric patients receiving topical corticosteroids. Manifestations of adrenal suppression in pediatric patients include linear growth retardation, delayed weight gain, low plasma cortisol levels, and absence of response to ACTH stimulation. Manifestations of intracranial hypertension include bulging fontanelles, headaches, and bilateral papilledema.
Administration of topical corticosteroids to pediatric patients should be limited to the least amount compatible with an effective therapeutic regimen. Chronic corticosteroid therapy may interfere with the growth and development of pediatric patients.

ADVERSE REACTIONS
The following local adverse reactions are reported infrequently with topical corticosteroids, but may occur more frequently with the use of occlusive dressings. These reactions are listed in an approximate decreasing order of occurrence.

Burning	Hypertrichosis	Maceration of the skin
Itching	Acneiform eruption	Secondary infection
Irritation	Hypopigmentation	Skin atrophy
Dryness	Perioral dermatitis	Striae
Folliculitis	Allergic contact dermatitis	Miliaria

OVERDOSAGE
Topically applied corticosteroids can be absorbed in sufficient amounts to produce systemic effects. (See PRECAUTIONS).

DOSAGE AND ADMINISTRATION
Betamethasone Valerate Cream 0.1%: Apply to affected skin areas one to three times a day. Dosage once or twice a day is often effective.
Betamethasone Valerate Lotion 0.1%: Apply a few drops to the affected areas and massage in lightly until it disappears. Apply twice daily, in the morning and at night. Dosage may be increased in stubborn cases. Following improvement, apply once daily. For the most effective and economical use, apply nozzle very close to affected area and gently squeeze bottle.
Occlusive dressings may be used for the management of psoriasis or recalcitrant conditions.
If an infection develops, the use of occlusive dressings should be discontinued and appropriate antimicrobial therapy instituted.

HOW SUPPLIED
Bethmethasone Valerate Cream 0.1% is available in 15 gram tubes and 45 gram tubes.
Betamethasone Valerate Lotion 0.1% is available in 60 mL plastic squeeze bottles.
Store at controlled room temperature, between 20° and 25°C (68° and 77°) (See USP). Protect from light. Store in carton until contents are used.
For dermatologic use only. Not for ophthalmic use.
Manufactured By:
TEVA PHARMACEUTICALS USA
Sellersville, PA 18960
Rev. I 2/2003